



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,995	02/27/2004	Krzysztof Matyjaszewski	00093CON	1410

26285 7590 06/09/2005

KIRKPATRICK & LOCKHART NICHOLSON GRAHAM LLP  
535 SMITHFIELD STREET  
PITTSBURGH, PA 15222

EXAMINER

CHEUNG, WILLIAM K

ART UNIT	PAPER NUMBER
----------	--------------

1713

DATE MAILED: 06/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/788,995	MATYJASZEWSKI ET AL.	
	Examiner	Art Unit	
	William K. Cheung	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 286-319 is/are pending in the application.
- 4a) Of the above claim(s) 286-305 and 314-317 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 306-313, 318 and 319 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Request for Continued Examination***

1. The request filed on May 23, 2005 for a Request for Continued Examination (RCE) under 37 CFR 1.53(d) based on parent Application No. 10/788995 is acceptable and a RCE has been established. An action on the RCE follows.

### **Claim Rejections - 35 USC § 102**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### **Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 1713

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 306 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Keoshkerian et al. (US 5,891,971) for the reasons adequately set forth from paragraph 5 of final office action issued November 24, 2004.

Keoshkerian et al. (col. 15-16) in examples I and II disclose a block copolymer using the macromer of example I which is prepared using TEMPO as a living radical initiator. Because the block copolymer of example II involves using the macromer of example I (col. 15-16) which has a conversion of 65 percent, the examiner has a reasonable basis that the claimed copolymers are inherently possessed in Keoshkerian et al. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

Art Unit: 1713

5. Claims 307 are rejected under 35 U.S.C. 102(b) as anticipated by Keoshkerian et al. (US 5,891,971) for the reasons adequately set forth from paragraph 6 of final office action issued November 24, 2004.

Keoshkerian et al. (col. 15-16) in examples I and II disclose a block copolymer using the macromer of example I which is prepared using TEMPO as a living radical initiator. Because the block copolymer of example II involves using the macromer of example I (col. 15-16) which has a conversion of 65 percent, the examiner has a reasonable basis that the claimed copolymers are inherently possessed in Keoshkerian et al. Claim 307 is anticipated.

6. Claims 308-313, 318-319 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Keoshkerian et al. (US 5,891,971) for the reasons adequately set forth from paragraph 7 of final office action issued November 24, 2004.

Keoshkerian et al. (col. 15-16) in examples I and II disclose a block copolymer prepared by using TEMPO as living radical initiator. Because the block copolymer of example II involves using the macromer of example I (col. 15-16) which has a conversion of 65 percent, the examiner has a reasonable basis that the residual first monomer would facilitate the formation of a tapered block portion in the disclosed copolymers of example II. Since the PTO does not have proper means to conduct

Art Unit: 1713

experiments, the burden of proof is now shifted to applicants to show otherwise. In re Best, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

### ***Response to Arguments***

7. Applicant's arguments filed May 23, 2005 have been fully considered but they are not persuasive. Applicants argue that the block copolymers of Keoshkerian et al. are pertained to a well defined block copolymers in view of Keoshkerian et al. (col. 5, line 38-44). However, the examiner disagrees because Keoshkerian et al. (col. 3, line 38-47) clearly indicate that the polymerization process can be imperfect as compared to a block copolymerization obtain in an anionic polymerization process. As indicated by the broader molecular weight distribution, it would be apparent to one of ordinary skill in art in block copolymerization chemistry to recognize that broader molecular weight distribution associated with the process of Keoshkerian et al. means that there are still chain transfer reactions within the process of Keoshkerian et al. Hence, the copolymers of Keoshkerian can be a perfectly diblock or a tapered-block copolymers.

Regarding applicants' argument that Example I of Keoshkerian et al. involves the isolation of the first polymer, Keoshkerian et al. is completely silent on the argued isolation step. If the polymer of Example I has been isolated, Keoshkerian et al. must

Art Unit: 1713

have indicated that the polymer has been isolated as the isolation step is clearly indicated in Example II (precipitated in methanol).

Regarding applicants' argument that block copolymers obtained in Example II of Keoshkerian et al. is a well-defined block, Keoshkerian et al. (col. 3, line 38-47) clearly indicate that the process of Keoshkerian et al. may or may not produce a perfect diblock copolymers.

### **Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1713

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung  
Primary Examiner

June 3, 2005

**WILLIAM K. CHEUNG  
PRIMARY EXAMINER**